

# **Intrinsic Factors Affecting Entrepreneurial Intention and Intended Behaviour Among MBA Students**

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## **Abstract**

This study focuses on identifying the intrinsic factors affecting the entrepreneurial intentions of Sri Lankan MBA students, and how the intended behaviour contributes towards SME start-ups and growth. It provides further support for the use of Ajzen's Theory of Planned Behavior (1991) as the basis for an entrepreneurial intentions model to test the antecedents of entrepreneurial intentions. Additionally, the study explores the presence of association between the internal values of an individual and how they contribute to forming entrepreneurial intentions. It was found that individuals with higher order values (i.e. physiological, social) have a greater tendency to become entrepreneurs in the future since they realize that entrepreneurship would signify their value in society and ultimately lead to self-actualization. There is a positive relationship between subjective norms and self-efficacy and intentions to become an entrepreneur, while start-up of SME is the preferred entrepreneurial activity among Sri Lankan MBA students. Further, the entrepreneurial mind-set of an individual enhances his/her intention towards SME start-up and growth initiatives.

**Key Words:** Entrepreneurship, MBA students, Internal Value System, Subjective Norms, Self-Efficacy, Entrepreneurial Mind-set, SME Growth.

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## **Introduction**

Economic development and entrepreneurship are closely knit since entrepreneurs drive economic growth (Baron and Shane, 2008; Mellor et al., 2009). Being a social function involved in the creation of value through innovation and risk taking, entrepreneurship plays a pivotal role especially in a developing society like Sri Lanka (Ranasinghe, 1996). Although various means and ways are introduced to promote entrepreneurial activity among Sri Lankan youth, none of them have succeeded in producing entrepreneurs in the Sri Lankan economy. According to published statistics for five years from 2007 to 2012, employment in the public sector increased only by 1.2 percent while in the private sector it decreased by 1.2 percent. The trend towards self-employment via entrepreneurial activity increased by approximately one percent of the total employment (Sri Lanka Labor Force Survey, 2012). Hence, it is evident that entrepreneurial activity in Sri Lanka is not a major contributor to either new job creation or economic growth. This is further evident in the growth of the number of employers (i.e. who have at least one paid employee under them), the self-employed and unpaid family workers (i.e. who make their contribution to economic activity carried out by their own household) from 2007 to 2012 (3rd Quarter), which showed a marginal growth and a 4.1 percent rate of unemployment in 2012.

Intrinsic barriers and extrinsic barriers (financial, physical resources, marketing, socio-cultural factors, rules and regulations) are identified as factors limiting entrepreneurship (Gorji, 2011). With the effects of globalization, innovations in ICT, the end of the civil war and the improved socio-economic situation in Sri Lanka, the external obstacles to entrepreneurial intentions have been minimized to some extent. But the rate of entrepreneurial activity has not proportionately increased according to published statistical evidence. The decision to become an entrepreneur can be voluntary, intentional, or conscious (Krueger et al., 2000), and has an instrumental value based on individual's perceptions. The personal decision to become an entrepreneur can be understood via cognitive variables (Shaver & Scott, 1991). The behavioural and cognitive focus gives additional insights into the multifaceted processes of entrepreneurship. Most of the successful Sri Lankan entrepreneurs started their entrepreneurial career with virtually nothing, having left their villages in their early youth and found some odd jobs in the cities, which gave them an initial experience of business (Ranasinghe, 1996). A feature common to all these entrepreneurs is intuition, which enabled them to seize an opportunity in the

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market, innovativeness, focused intention to achieve goals and take calculated risks (Ranasinghe, 1996), all of which, in turn, stem from the intrinsic characteristics of a person. Hence, it could be argued that intrinsic factors play a vital role in stimulating entrepreneurship and act as a catalyst in the process.

The MBA is one of the most effective methods by which the entrepreneurial intention is planted in managers, executives, directors, general managers, etc. and through which they are brought closer to the status of entrepreneurs via formal management education (Olawale and Garwe, 2010). Further, people tend to start a business within the age range of 25 to 44 (Liles, 1974). Hence, it is critical to focus on people of these age groups and understand the internal factors affecting their intentions towards business start-ups in the future since "...the future working environment will depend on the creativity and individuality of the young" (Henderson and Robertson, 2000). Further, MBA students are in a better position to provide a logical argument for their career choice (Leiffel, Anita, Darling & John, 2009). There are several empirical studies conducted to identify factors affecting the entrepreneurial intentions of MBA students in Sri Lanka as well as in other countries. Previous studies (Kristiansen and Indart 2004, Fatoki, O 2010, Gird & Bargrain 2008) revealed that the level of entrepreneurial intentions of university business students seemed to be high, particularly in the USA, European countries and Asian countries such as Malaysia and Indonesia. There are increasing numbers of MBA students across developing countries considering entrepreneurship, whether as a choice or a necessity, and embark on a new venture (Pietrobelli, Rabellotti, and Aquilina, 2004). But in contrast, Nishantha (2008) indicates that there is an 'entrepreneurship deficit' among Sri Lankan MBA students and Weeratunge (2001) noted that educated youth generally have negative attitudes toward self-employment and business ownership.

Entrepreneurship is strongly linked to small and medium enterprises (SMEs), which are the main driving force of developing economies like Sri Lanka. SMEs usually represent the majority of enterprises, and accordingly they are the main driving force of entrepreneurship development, and the economy. Firms with 10 to 50 employees are identified as small enterprises while those with 50 to 100 are identified as medium enterprises. In most of the developed countries, the percentage of SMEs is approximately 90 percent of the total number of enterprises with 60 percent of the available workforce employed in them. The last comprehensive survey of the local SME market conducted in 2007 by IFC (International Financial Corporation) estimated that there were about 18,000 businesses in Sri Lanka, of which about

80 percent were SMEs, contributing up to 35 percent of jobs in the country and generating more than 70 percent of Sri Lankan GDP. SMEs stimulate initiative, invention and an overall entrepreneurial spirit. Their specificities enable them to be far more flexible than large enterprises, which is one of the basic conditions for adaptability to environmental shifts (Stefanovic, Milosevic & Miletic, 2011). Stewart and Roth (1999) discovered that entrepreneurs, who are primarily growth-oriented, were “small business owners”. Hence the development of entrepreneurial activities and the growth of SMEs are closely coupled with each other.

Having noted this possible interaction between entrepreneurship and small businesses, the researchers’ aim to identify the intrinsic factors affecting entrepreneurial intentions of individuals and how the intended behaviour contributes towards the growth of SMEs in Sri Lanka. Entrepreneurship is a rigorous process that occurs over time (Kyro and Carrier, 2005). In this sense, entrepreneurial intentions would be the first step in understanding the evolving nature and sometimes long-term process of venture creation (Lee, J, Cerreto, F.A., & Lee, J. 2010). Intentions are connected to the term ‘intentionality’, where the entrepreneurial behaviors and intentions to start up would be a helpful and determinant element towards performing entrepreneurial behaviours (Fayolle and Gailly, 2004). In addition, intentions act as a single best predictor of that behavior (Fishbein and Ajzen, 1975). Identifying the internal impediments to creating a new business in society can help to eliminate the barriers and to ‘make entrepreneurship accessible to all’. A careful analysis of the effect of intrinsic factors that influence the decision to be an entrepreneur is fundamental in determining and explaining the marginal growth of entrepreneurial activity in Sri Lanka, which is the key to this research.

The paper proceeds as follows: First, the literature review which is focused on empirical research conducted based on Ajzen’s Theory of Planned Behavior is presented. Then the conceptual model is presented together with the underlying hypotheses. Subsequent sections of the paper deal with the research methodology and results followed by a discussion on managerial and theoretical implications, limitations, directions for future research and the conclusion.

### **Literature review**

An “entrepreneur” is a person who takes on an active risk-bearing role in pursuing opportunity. Bann (2009) states that an entrepreneur is an individual who views and acts upon the world differently from others. Further, Bird (1988) defines an

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entrepreneur as an individual who starts (creates) an independent, new, profit-making business venture. Hisrich and Peters (2002) define entrepreneurship as “the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic and social risks, and receiving the resulting rewards of monetary and personal satisfaction and independence”. There are some fundamental aspects of being an entrepreneur. First, entrepreneurship emerges with the creation of something new with value to the entrepreneur and to society. Second, entrepreneurship requires individual commitment to a great extent due to difficulties in creating an innovative idea effectively, and bringing it to reality, which is the most demanding process. Preparedness to take necessary risks is the third aspect of entrepreneurship. The latter part of the definition involves the rewards of being an entrepreneur. The most important of these rewards is personal satisfaction, followed by independence.

Explaining human behaviour and orientation towards an action is a complex task. One approach used by researchers to explain an individual's action is through the application of cognitive theory (Lord and Maher, 1991). Using a cognitive framework, Ajzen (1991) developed a model of planned behaviour and reported this model to be a highly effective predictor for a wide range of behaviours in a number of studies. The theory assumes intention to be the immediate antecedent of behaviour and subjective norms (i.e. the social pressure to perform the behavior), perceived behavioural control (i.e. a self-evaluation of one's own competence with regard to the task or behaviour), attitude towards behaviour (i.e. the degree to which individuals perceive desirable or undesirable appraisals of the behavior) are antecedent intentions. The theory states that attitude towards behaviour, subjective norms, and perceived behavioural control together form an individual's behavioural intentions and behaviours.

There are a number of studies that apply all dimensions of Ajzen's model to the area of entrepreneurial intent, providing a cognitive representation of the actions to be implemented by individuals to establish new ventures (Bird, 1988; Venkataraman, 2000). The majority of these studies support the usefulness of Ajzen's theory and his view, that behavioural intent is a powerful predictor of the targeted behaviour. In the Sri Lankan context Jayathilake (2010), Thrikawala and Perera (2010) and Perera, De Alwis & Senathiraja (2008) have researched the relationships between some antecedents of Ajzen's model. Based on the success of Ajzen's overall model in predicting entrepreneurial behaviour with an average multiple correlation of 0.73,

the present researchers have chosen Ajzen's Theory of Planned Behavior as one of the theoretical underpinnings of the present study.

### ***Internal value system of an individual and entrepreneurial intention***

For a given behaviour, it is expected that the outcomes of the behaviour are capable of satisfying what the individual needs and wants (i.e., the expected value of performing the target behaviour). These expected values resulting from a given set of behaviours form the basis of Ajzen's first TBP model antecedent of intention "attitude towards the behaviour". Values are (a) concepts or beliefs (b) about desirable end state or behaviors, (c) transcend specific situations, (d) guide selection or evaluation of behaviour and events and (e) are ordered by relative importance (Schwartz, 2012). Individuals use their values to help rationalize and guide their attitudes (Mickens, 1992) and value systems provide a rich context for understanding the motivational forces driving an individual's attitudes. Unlike constructs that are more peripheral to an individual (e.g., attitudes, opinions), values are relatively permanent, although capable of being changed under certain conditions. Rokeach (1973) mentioned that values are stable because they are learned in isolation from each other in an all-or-nothing manner. However, since attitudes are changeable, they probably should not be used in isolation to predict intentions and behaviors.

Values are based on experiential and philosophical considerations and represent higher level aspirations that provide overarching life guidelines (Schwartz, 1992). In the context of entrepreneurship an individual attempting to become an entrepreneur will be driven or motivated by one or more value domains described in Liyanage's value pyramid (Liyanage, 2005). These underpinning end or terminal values such as a comfortable exciting life, a sense of accomplishment, pleasure, self and social recognition stimulate the entrepreneurial behaviour of an individual. The meaning and utilization of use value (i.e. value "for me") and the sign value (i.e. value "of me") of entrepreneurship to an individual is based on perceived terminal value. Hence, it is prudent to examine the relationship between values and entrepreneurial intentions by considering the questions "Does entrepreneurship have a "value for me?" and "Does entrepreneurship signify "value of me?"

Entrepreneurial activity can be used to solve problems in an optimal way at a functional level. One may decide to become an entrepreneur to "experience" the sense of freedom, work independently and not being tied to an organizational environment.

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The symbolic value of entrepreneurship may help an individual to belong to a particular reference group. It may also help to project an individual's image and enhance his or her status in society – as one who is a role model. At a physiological level, an individual may feel self-worth since the entrepreneurial activity helps him to achieve wealth and fulfil personal aspirations while contributing to the economy and to the country as a whole. These are all values that become relevant to an individual in being an entrepreneur. In the context of MBA students it can be argued that physiological or social value (i.e., higher order values) seekers obtain an MBA qualification to enhance personal competence and to use it as a tool to outperform peers. It is challenging and brings the best out of an individual and ultimately helps to achieve broader social recognition, wealth and self-actualization. Table 1 describes the relationship between Liyanage's value domains and entrepreneurship.

**Table: 1: Value domains and relationships with entrepreneurship**

	<b>Value Domain</b>	<b>Central Meaning</b>	<b>Core Purpose</b>
Does entrepreneurship have a "Value for me"?	Functional	What entrepreneurship does for me.	Solve Problems
	Experiential	What entrepreneurship does to me.	Creates Pleasure
Does entrepreneurship signify "Value of me"?	Relational	What entrepreneurship does with me.	Helps Belong
	Social	What entrepreneurship says about me.	Enhances status
	Heightens	What entrepreneurship says to me.	Physiological self-worth

*Source:* Adopted from Liyanage (2005)

Psychological needs are innate whereas values are acquired and cognitively elaborated structures. Many authors propose links between psychological needs and values, and argue that values must, at least partially, originate from basic needs satisfaction (Kasser, 2002; Maslow, 1956; Schwartz, 1992). Ryan and Deci (2000) theorized that values represent avenues for needs satisfaction. However, the relationship between need satisfaction and value orientation has never been tested empirically (Bozgeyikli, 2010). The value system is responsible for shaping or providing a context for the attitudes an individual develops (Rokeach, 1973). Attitudes, in turn, drive intentions and ultimately behaviours (Ajzen, 1985; Fishbein and Ajzen, 1980). Because of the stability of values and their influence on attitudes, values may provide a rich context within which attitudes and intentions can be analyzed. According to

Hisrich and Peters (2002), personal satisfaction and fulfilment of one's own desires are fundamental rewards gained via entrepreneurship. These are related to higher order values (i.e., physiological and social) in Liyanage's value pyramid. Based on the above discussion, it is hypothesized that:

*H<sub>1</sub>: The internal value system of an individual and his/her intention to become an entrepreneur are positively related and among internal values, higher order values which signify "value of me" have greater impact on entrepreneurial intentions of the individual.*

### ***Subjective norms and entrepreneurial intentions***

Ajzen's second antecedent of intention is subjective norms. According to Ajzen (1991, p. 195), this construct refers to the "likelihood that important referent individuals or groups approve or disapprove of performing a given behaviour." The presence of this construct is supported by the social learning theory which suggests that individuals are more likely to adopt behaviours observed in the family and among close friends or mentors, especially if the outcomes of such behaviour are valued (Bandura, 1977). The application of this construct to entrepreneurial intent is further strengthened by Cialdini and Trost (1998) whose research suggested that social norms have the greatest impact when conditions are uncertain. When deciding whether or not to become an entrepreneur, subjective norms represent the normative beliefs towards entrepreneurship as a career choice weighted by the motivation to comply with these normative beliefs. Previous research has proven subjective norms to be important (Krueger, 1993; Kolvareid, 1996). The opinions of parents, partners, friends and important others might be influential in making entrepreneurial decisions. Jayathilake (2010) found a positive relationship between the subjective norms and entrepreneurial intentions of Sri Lankans. Hence it is reasonable to hypothesize that:

*H<sub>2</sub>: The higher the likelihood that important referent individuals or groups approve of the entrepreneurial behaviour of an individual, the higher the tendency towards forming entrepreneurial intentions.*

### ***Entrepreneurial self-efficacy and entrepreneurial intentions***

The third antecedent of intention is perceived behavioural control. Ajzen (1991) states that this construct is most compatible with Bandura's (1982) concept of perceived self-efficacy, which involves the degree to which one perceives his ability to



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successfully handle given situations. Self-efficacy measures have been used instead of perceived behavioural control within the Theory of Planned Behaviour in several studies with positive results (Conner and Armitage, 1998). Hence, entrepreneurial self-efficacy, the degree to which one believes that he/she is able to successfully start a new business venture, (Bandura, 1986) is chosen for this study. Research in this area has shown that an individual's behaviour is highly influenced by confidence in his/her ability to perform the behaviour necessary to be successful (Bandura et al., 1982; Swan et al., 2007). The empirical research literature has found a strong link between self-efficacy and behaviour which, in turn, relates to the hypothesis:

*H<sub>3</sub>: The higher the degree to which one believes that one is able to successfully start a new business venture, the higher the tendency towards forming entrepreneurial intentions.*

### ***Behaviour resulting in SME startup and growth***

The behaviour of entrepreneurs is strongly affected by intentions (e.g. Krueger & Carsrud, 1993, Bird, 1988). The firm's strategic behaviour and subsequent growth are understandable in the light of its owner's growth intention (Pasanen, 2007). SME growth can be defined as "an instrument for increasing profitability by enlarging the firm's market share, securing the continuity of business in the conditions of growing demand, achieving economies of scale and bringing the firm new business opportunities (Timmons, 1999)." Particularly in SMEs, growth objectives are often bound up with the owner's intentions (Jennings & Beaver, 1997). Growth can be measured with a range of different indicators, the most frequently suggested being sales, employment, assets, market share and profits (Ardishvili et al., 1998; Delmar, 1996; Weinzimmer, Nystrom & Freeman, 1998; Wiklund, 2007). Stewart et al. (1999) discovered that entrepreneurs who are primarily growth-oriented were "small business owners". This relates to the hypothesis that:

*H<sub>4</sub>: The higher the entrepreneurial intention of the business owner, the higher the tendency towards behaviour resulting in SME startup and growth.*

### ***Entrepreneurial mindset***

The entrepreneurial mindset is an important success factor for SMEs in stimulating growth. It is defined as creativity, innovation and taking opportunities and risks that lead to organizational wealth creation and success (Dhliwayo and Vuuren,

2007). This type of mindset enables entrepreneurs to make realistic decisions when faced with uncertainties (Dhliwayo and Vuuren, 2007). Individuals with an entrepreneurial mindset see needs, problems and challenges as opportunities and develop innovative ways to deal with the challenges, exploit and merge opportunities. Amit et al. (2001) found that the most important dimensions of the entrepreneurial mindset are innovation, independence, vision and self-actualization which, in turn, act as catalysts to SME start-up and growth intentions of an individual. Carsrud et al. (2000) observed that the presence of innovativeness, opportunity recognition and higher risk appetite in an individual have greater influence on new venture start-ups when compared to the absence of the above variables. In other words, the said factors act as moderators of resultant behaviour since their presence would enhance the magnitude of resultant behaviour. Based on the above logical arguments, it can be reasonably assumed that there is a moderating effect on the relationship between entrepreneurial intention, entrepreneurial mindset and SME growth which lead to the following hypothesis:

*H<sub>5</sub>: The relationship between entrepreneurial intention and behaviour resulting in SME startups and growth is moderated by the entrepreneurial mindset.*

### ***Entrepreneurial intention and mediation effect***

A mediator is often a cognitive, affective, physiological, motivational state that functions as a person's psychological process after receiving a stimulus such as intervention treatments (Hoyle & Robinson 2003). In turn, the responsive change in the mediator leads to a change in the outcome. A state is "a temporary condition of mentality or mood, transitory level of arousal or drive, and currently evoked activities or processes" (Messick 1989, p. 15). Theoretically and conceptually, a mediator should be a responsive variable that changes within a person. Hence, with the above arguments it is reasonable to consider the variable "entrepreneurial intention" as a mediator and to analyze its effects on the conceptual model. This hypothesis is that:

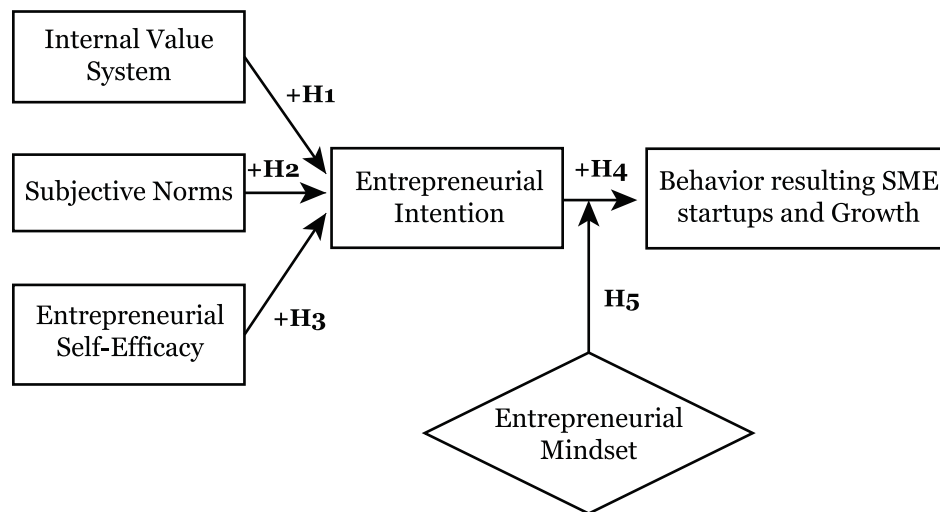
*H<sub>6</sub>: A mediation relation exists between Internal Value System, Subjective Norms, Entrepreneurial Self-efficacy and behaviour resulting in SME start-ups and growth via the mediator, Entrepreneurial Intention.*

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### Conceptual model

The conceptual model which depicts the hypothesis stated above is based on the discussion in the previous section. As stated above, the base of this conceptual framework is the Theory of Planned Behaviour (Ajzen, 1991) which has become the most frequently used theoretical framework in recent studies of entrepreneurial intention (Alexei and Kolvereid 1999; Audet 2002; Autio et al., 2001; Krueger et al 2000).

**Figure 1: Conceptual framework of the research**



*Source:* Constructed by the researchers

Internal Value System (IVS), Subjective Norms (SBN) and Entrepreneurial Self Efficacy (ESE) are treated as independent variables in this study while behaviour resulting in SME start-ups and growth (SME) is the depended variable. According to the conceptual framework shown in Figure 1, it is assumed that there is a positive relationship between IVS, SBN, ESE and Entrepreneurial Intention (INT). Further, as per the hypothesis there is a positive relationship between Entrepreneurial Intention and behaviour resulting in SME start-up and growth while the said relationship is moderated by the individual's entrepreneurial mindset (EMS). Hence, EMS is treated as the moderating variable. The present researchers suppose that the entrepreneurial intention acts as a mediator.

## **Research Methodology**

### ***Sample and survey administration***

The study is mainly focused on MBA students who are equipped with formal management education. It is expected that the formal education in management aspects will help to express entrepreneurial determinants affecting them in a more logical and sequential fashion. MBA students (i.e. students who are currently following MBA degree programmes and are exposed to entrepreneurial education) of PIM, University of Sri Jayewardenepura (PIM), Faculty of Management, University of Sri Jayewardenepura (SJP), Faculty of Engineering/Management of Technology, University of Moratuwa (MRT), Faculty of Management, University of Colombo (CMB), Faculty of Management, University of Kelaniya (KLN) and Private MBA degree-offering institutes (PVT) were selected as the primary data source for this research. The data was collected/gathered/accumulated etc. through a standard questionnaire sent to 300 respondents.

The cross sectional (survey) method was used in this study as most studies adopting TPB have used the quantitative method (Lee et al., 2010; Lin, 2007; Reyhav & Weisberg, 2010). Empirical research by MacCallum, Browne, and Sugawara (1996) suggests that sample-size requirements depend on the desired power, the null hypothesis being tested, and the overall model complexity. MacCallum et al. (1996) also encourage researchers to use larger sample sizes when testing more complex models. Based on the above research, it was decided that a sample size of 300 is sufficient for this research. The present researchers used the judgment sampling method as it has been proved to be convenient and successful by Kristiansen and Indart (2004) for similar studies. It is a non-probability sampling technique in which an experienced individual selects the sample based on his judgment about some appropriate characteristics required of the sample member. The method had the advantage of balancing the representation of age and gender groups and ability to select the desired percentage of students faculty- or university-wise. The present researchers personally administered the survey. The data was collected at several sessions of regular lectures. Survey forms were carefully analyzed for missing values at the time of the collection. If missing values were observed respondents were requested to complete them at that time itself.

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### ***Analysis methodology***

The structural equation model (Lei et al., 2007) was used to analyze data since it can be used to study the relationships among latent constructs that are indicated by multiple measures. It is also applicable to both experimental and non-experimental data as well as cross-sectional and longitudinal data. SEM takes a confirmatory (hypothesis testing) approach to the multivariate analysis of a structural theory -one that stipulates causal relations among multiple variables. The goal was to determine whether the hypothesized theoretical model is consistent with the data collected and the consistency was evaluated through model-data fit, which indicates the extent to which the postulated network of relations among variables is reasonable. The technique was adequate in the context of 300 samples since it is considered a large sample (usually  $N > 200$ ; e.g., Kline, 2005, pp. 111, 178). Further, SEM is the only analysis that allows complete and simultaneous tests of all the relations (Weston, 2006) and the distinct advantage of SEM is the ability to test construct level hypotheses at the appropriate level. Since the proposed conceptual model consists of complex higher order constructs this method was considered appropriate by the researchers. AMOS Ver. 21 (Analysis of Moment Structures) statistical package was used to perform the basic steps of SEM analysis such as model specification, model estimation, model evaluation, and model modification (Hoyle, 1995; Kaplan, 2000; Kline, 2005). These steps are described in subsequent sections in detail.

### ***Measures***

#### **i. Entrepreneurial Intention Questionnaire (EIQ) – V3.1**

The Entrepreneurial Intention Questionnaire (EIQ) is based on an integration of psychology variables and entrepreneurship literature as well as previous empirical research in the field of entrepreneurial intention. The constructs in the questionnaire help in explaining the entrepreneurial intentions, according to the Theory of Planned Behaviour (Ajzen, 1991). It is based on the existent theoretical and empirical literature on the application of the theory of planned behaviour to entrepreneurship and behaviour resulting in SME start-ups and growth. EIQ items have been built as 7-point Likert-type scales. EIQ has been carefully cross-checked with those instruments used by other researchers such as Kolvereid (1996), Kickul and Zaper (2000), Krueger et al. (2000) and Veciana et al. (2005). Further, along the questionnaire construction process, Ajzen's (1991, 2001 and 2002) work was carefully reviewed to solve any divergence that might have arisen between the

different constructs. Further, construct validity and psychometric properties of EIQ have already been validated. Linan, (2005) used EIQ to assess entrepreneurial intention of 400 students from Spain, 1000 from Portugal , 133 from Taiwan, 94 from Maastricht (Netherlands) and 60 from Bolivia and showed that EIQ was used on different samples with good results. This questionnaire facilitates measures of the entrepreneurial mindset and SME growth prospects in terms of innovativeness, achieving higher sales, higher return on assets, higher margin on profits and focusing on employee growth.

Entrepreneurial intention was measured through a series of statements as “I am ready to do anything to be an entrepreneur” and entrepreneurial self-efficacy was measured using sentences indicating different aspects of self-efficacy including “Starting a firm and keeping it viable would be easy for me”. Subjective norms, according to Ajzen (1991), should be approached through an aggregate measure such as “What do important others think?” Hence statements such as “My immediate family would approve of my decision to start a business” were used to measure the said construct. Statements like “I always tend to come up with innovative ways to deal with challenges/problems” and “Reaching a high level of income is essential for my firm’s growth” were used to measure the entrepreneurial mindset and behaviour resulting in SME start-ups and growth.

The firm’s strategic behaviour and subsequent growth can be understood in the light of its owner’s growth intention (Pasanen, 2003). Particularly in SMEs, growth objectives are often bound up with the owner’s intentions (Jennings & Beaver, 1997). The research questionnaire asked participants to indicate if the respondent intended to start a business and the size of the entity that they would like to achieve ultimately (number of employees).

ii. Porter Need Satisfaction Questionnaire (1961) – PNSQ

The value domains described by Liyanage (2005) can be arranged as a pyramid where individuals may find a terminal end value at one of the five steps of the hierarchy. A parallel is found in Maslow’s hierarchy of needs theory. He hypothesized that within every human being is a hierarchy of needs such as physiological, safety, social, esteem and self-actualization. It is argued that physiological and safety needs relate to functional value while relational value corresponds to Maslow’s social needs. Esteem needs relate to “social values” and self-actualization needs to physiological value in Liyanage’s value pyramid. Although there is no equivalence between the

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two frameworks, it is argued that there is a striking correspondence between them (Liyanage, 2005). Porter's Need Satisfaction Questionnaire (PNSQ) was developed by Porter (1961) and stems from Maslow's hierarchy of needs theory and has been widely used in need satisfaction studies. This questionnaire was used to obtain measures relating to need fulfilment (i.e., functional, experiential, relational, social and physiological) and is used to operationalize Liyanage's value system due to the correspondence between the two frameworks described above. The questionnaire was slightly re-worded to suit the entrepreneurial context. This approach had been used when using this questionnaire in various contexts such as job satisfaction of librarians (Patterson, 1975) and needs satisfaction of educators (Pierson et al, 1985). It contains 13 randomly placed items, each one of which falls into one of five need categories. For each of the 13 items respondents were requested to answer questions by rating on a scale from 1 to 7, where low numbers represent low or minimum amounts and high numbers represent high or maximum amounts of how much need fulfillment is there now, should there be and how important it is to the respondent. The higher the value of the need fulfilment score, the higher the perceived satisfaction; the higher the need deficiency score, the higher the dissatisfaction; and the higher the needs importance score, the higher the importance of the need. The PNSQ is validated by Porter and Lawler (1968), Roberts, Walters and Miles (1971), Waters and Roach (1973) and Weber and Hadd (1974).

### **Analysis and results**

#### ***Sample composition***

The sample comprised 67 respondents from the Postgraduate Institute of Management (PIM), University of Sri Jayewardenepura, 68 respondents from the Faculty of Management, University of Sri Jayewardenepura, 50 respondents from the Faculty of Engineering/Management of Technology, University of Moratuwa, 65 respondents from the University of Colombo and 25 respondents from the University of Kelaniya and private MBA degree-offering institutes each. The statistics reveal that 64 percent of respondents were males while 36 percent were females. Further, it was observed that 43 percent of respondents were in the 31-35 years age group, 24 percent respondents were in the 36-40 years age group and 19 percent were in the 25-30 age group. Among the respondents 11 percent were self-employed and the others were employed in public/private firms.

### ***Measurement model***

The measurement model of SEM was used to evaluate how well observed (measured) variables combine to identify the underlying hypothesized constructs. According to the conceptual model used in the research, there are six latent variables, namely, Internal Value System (IVS), Subjective Norms (SBN), Entrepreneurial Self-Efficacy (ESE), Entrepreneurial Intention (INT), Entrepreneurial Mind-set (EMS) and behavior resulting in SME start-up and growth (SME) respectively. Each latent variable is measured by separate indicators derived from measures used to operationalize the concepts. The researchers were strongly discouraged from testing models that include constructs with single indicators (Bollen, 1989). Hence, special focus was given in operationalization to have at least two indicators to measure each latent variable.

Internal Value System (IVS) is a latent construct derived from Liyanage's value pyramid (2005), which consists of 1st order latent variables such as Functional (FNC), Experiential (EXP), Relational (REL), Social (SOC) and Physiological (PHY). Indicator variables for each of the above 1st order constructs are derived from respondents' answers to the 7-point Likert scale questionnaire called Porters Needs Satisfaction Questionnaire (PNSQ) – 1961. Similarly, the higher order latent variable SME growth is derived from 1st order constructs called High Sales (HS), High Return on Assets (HRA), Higher Margin on Profits (HMP) and Higher Employee Growth (EG). Indicator variables for each of the above 1st order constructs as well as for other latent constructs, i.e., INT, SBN, ESE and EMS are derived from respondents' answers to the 7-point Likert scale questionnaire, Entrepreneurial Intention Questionnaire (EIQ) – V3.1. To estimate the relationships among latent variables, each latent variable must have an assigned scale. This problem was addressed by setting one factor loading (the parameter from a latent variable to an indicator) to 1.0. The model's overall fit is the same regardless of the option chosen.

To determine whether univariate normality exists in the sample data, the present researchers examined the distribution of each observed variable for Skewness and Kurtosis. For the Skewness Index, absolute values greater than 3.0 are extreme (Chou & Bentler, 1995) and absolute values higher than 10.0 for the Kurtosis index suggest a problem, and values higher than 20.0 are extreme (Kline, 2005). As per the statistical analysis, it is evident that the values for Skewness and Kurtosis Indexes for indicators are in an acceptable range. Cronbach's Alpha was used to measure the reliability of constructs, the main reason being to observe the measurement error



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while the rule is that the higher the values of Cronbach's Alpha, the higher the degree of inter correlation among items in the scale (Hair et al. 2007). However, a measure above 0.6 suggests good reliability (Zikmundetal. 2009). Cronbach's Alpha values of each latent variable are given in Table 2.

**Table 2: Cronbach's Alpha of latent variables**

Variable	Cronbach'sAlpha	Cronbach's Alpha Based on Standardized Items
Internal Value System (IVS)	0.933	0.947
Subjective Norms (SBN)	0.922	0.929
Entrepreneurial Self Efficacy (ESE)	0.771	0.810
Entrepreneurial Intention (INT)	0.891	0.893
Entrepreneurial Mind-set (EMS)	0.941	0.943
Growth of SMEs (SME)	0.960	0.961

*Source:* Constructed by the researchers based on survey data

A model is said to be identified if there is a unique numerical solution for each of the parameters in the model. Determining whether a model (i.e., measurement/structural model) is over-, under- or just identified is a fairly straightforward process that involves determining the number of degrees of freedom (Lei et al., 2007). The following formula was used to determine the number of degrees of freedom.

$$(\text{Number of observed variables} [\text{number of observed variables} + 1])/2$$

Thus, the researchers were able to demonstrate that associations between observed and latent variables are most important. Next, to establish the identifiability of the measurement portion of the model the number of factors and measured variables were examined. In the measurement model, there are at least three indicators for each factor. Errors are uncorrelated and each indicator loads on only one factor. In addition, the covariance between the factors is not zero. Therefore, this hypothesized CFA model was predicted to be identified.

Estimation involves determining the value of the unknown parameters and the error associated with the estimated value. Maximum Likelihood (ML) estimation was used for this research to generate estimates of the unknown parameters using AMOS

software since the survey data was normally distributed. Anderson and Gerbing (1988) use confirmatory factor analysis to test the measurement model before estimating the full structural model. The confirmatory factor analysis tests whether indicators load on specific latent variables as proposed. After model estimation, researchers examined factor loadings to determine whether any indicators do not load as expected. The present researchers tested the structural model by estimating the expected directional associations among latent variables and found that indicators load on each latent variable as proposed (Table 3).

**Table 3: Factor loadings for measurement model**

Factor	IVS					SB N	ES E	IN T	EM S	SME			
	FN	EX	RE	SO	PS					HR	HM	EG	
	C	P	L	C	Y					A	P		
Average	0.7	0.7	0.6	0.7	0.8	0.6	0.6	0.5	0.6	0.4	0.6	0.6	0.7
Factor loadings	2	4	3	3	0	7	4	3	0	8	1	7	5

Source: Constructed by researchers based on survey data

Correlation matrices, means and standard deviations for latent variables of measurement model are described in Table 4.

**Table 4: Correlation matrices with means and SDs for latent variables – measurement model**

Variable	Mean	Variable						
		SD	IVS	SBN	ESE	INT	EMS	SME
JVS	5.37	1.30	1.000					
SBN	3.87	1.39	0.531**	1.000				
ESE	4.63	1.61	0.591**	0.439**	1.000			
INT	4.25	1.52	0.775***	0.542***	0.603***	1.000		
EMS	4.83	1.30	0.571*	0.402*	0.493**	0.658**	1.000	
SME	4.41	1.45	0.647**	0.424*	0.534**	0.684***	0.521***	1.000

Source: Constructed by the researchers based on survey data.

Note: \*\*\*Significant at 0.1% level, \*\*Significant at 1% level, \*Significant at 5% level

Brown (2006) recommends RMSEA close to 0.06 or less; SRMR close to 0.08 or less; CFI close to 0.95 or greater; and TLI close to 0.95 or greater for the “acceptable” model fit. According to Kline (2005), “RMSEA  $\leq$  0.05 indicates “close approximate

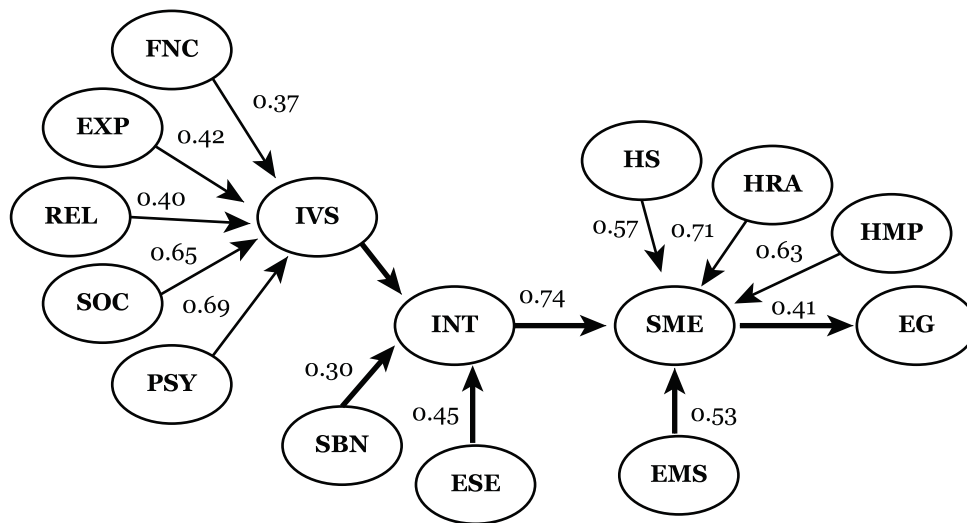
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fit”, values between 0.05 and 0.08 suggest “reasonable error of approximation”, and RMSEA  $\geq 0.10$  suggests “poor fit” (p. 139). CFI greater than roughly 0.90 may indicate “reasonably good fit of the researcher’s model” (Kline, 2005), and SRMR “less than 0.10 is generally considered favorable” (Kline, 2005). Model fit parameters for the measurement model of this research reported RMSEA of 0.018, CFI 0.988 and TLI 0.987. Reported values for NFI, RFI and IFI are close to 1.00. Hence, the measurement model indicates a “close approximate fit” with survey data.

### **Structural model**

A structural model specifies the hypothesized relationships among latent variables. The structural model for this research with standardized parameter estimates is shown in Figure 2.

**Figure 2: Structural model with standardized parameter estimates**



Source: Constructed by the researchers

According to Figure 2, there is a significant relationship between variables IVS and INT (Cor = 0.830,  $p < .001$ ), INT and SME (Cor = 0.740,  $p < .001$ ). SBN (Cor = 0.300,  $p < .001$ ) and ESE (Cor = 0.450,  $p < .001$ ) variables demonstrate a considerable level of relationship towards variable INT. The correlation matrix for the structural model is given in Table 5.

**Table 5: Correlation matrices – structural model**

Variable	Variable					
	IVS	SBN	ESE	INT	EMS	SME
JVS	1.00					
SBN	-0.04	1.00				
ESE	-0.12	0.02	1.00			
INT	0.83***	0.30***	0.45***	1.00		
EMS	0.10	-0.11	0.16	0.06	1.00	
SME	0.30**	0.01	0.09**	0.74***	0.53***	1.00

Source: Constructed by the researchers based on survey data.

Note: \*\*\*Significant at 0.1% level, \*\*Significant at 1% level & N = 300.

When considering the model fit for the structural model, RMSEA was 0.066 (which is a reasonable error of approximation), NFI, RFI, IFI, TLI and CFI values approaching 0.90 which indicates a reasonable fit.

### **Hypothesis testing**

According to the research findings it is evident that there is a significant positive correlation among Functional (Cor = 0.37,  $p < .001$ ), Experiential (Cor = 0.42,  $p < .001$ ), Relational (Cor = 0.40,  $p < .001$ ), Social (Cor = 0.65,  $p < .001$ ) and Physiological (Cor = 0.69,  $p < .001$ ) values of an individual (i.e., the Sri Lankan MBA student) towards forming his/her internal value system. In other words, functional, experiential, relational, social and physiological values of Sri Lankan MBA students positively contribute to forming their internal values and among them social and psychological values have a stronger contribution as found in this research context. In essence, Sri Lankan MBA students who intend to become entrepreneurs are not satisfied or seek pleasure by merely solving problems but by fulfilling higher order values of enhancing social status (What entrepreneurship says about me) and by heightening self-worth (What entrepreneurship says to me). There is a strong positive relationship between the internal value systems of MBA students and their intention to become entrepreneurs (i.e. Cor = 0.83,  $p < .001$  and Cov = 0.328). Hence, the research findings strongly support Hypothesis 1 ( $H_1$ ) and the internal value system of an individual, and his/her intention to become an entrepreneur is positively related. Among internal values, higher order values which signify “value of me” have greater impact on the entrepreneurial intentions of the individual. Individuals who are more

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concerned with achieving higher social status and self-actualization via their own work tend to demonstrate higher entrepreneurial intentions.

There is a positive relationship between subjective norms of MBA students and their intention to become entrepreneurs (i.e., Cor = 0.30,  $p < .001$  and Cov = 0.309). Hence, the statistical findings support Hypothesis 2 ( $H_2$ ) so that the subjective norm and entrepreneurial intention are positively related even though the strength of the relationship is not strong. The research findings depict that there is a positive relationship between entrepreneurial self-efficacy and intention to become an entrepreneur (i.e., Cor = 0.45,  $p < 0.001$  and Cov = 0.314). Entrepreneurial intention is high within individuals who believe that they are able to successfully start a new business venture and this supports Hypothesis 3 ( $H_3$ ).

The research findings reveal a significant positive correlation among SME growth aspirations and anticipated higher sales (Cor = 0.57,  $p < .001$ ), anticipated higher return on assets (Cor = 0.71,  $p < .001$ ), anticipated higher margin on profit (Cor = 0.63,  $p < .001$ ) and anticipated employee growth (Cor = 0.41,  $p < .001$ ). Further, there is a strong positive relationship between entrepreneurial intention and behaviour resulting in SME start-up and growth (i.e., Cor = 0.74,  $p < 0.001$  and Cov = 0.188). In other words, start-up of an SME is the preferred entrepreneurial activity among Sri Lankan MBA students (Table 6) and they expect that the said start-up will have growth opportunities if they are able to achieve higher sales, higher return on assets, and higher margin on profits while focusing on employee growth prospects. Thus, Hypothesis 4 ( $H_4$ ) is supported by the findings.

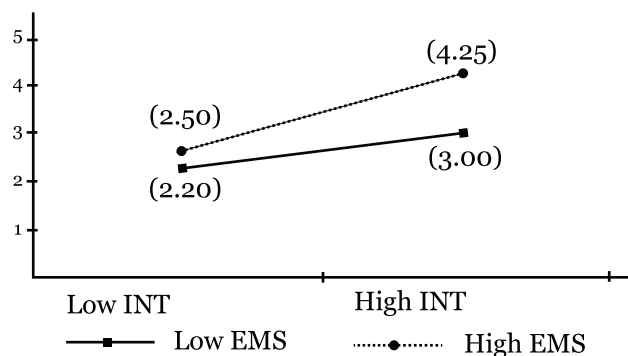
**Table 6: Firm start-up intentions of MBA Students**

Anticipated firm type	No.of Correspondents	%
Self-employed	17	6
Micro-enterprise (up to 10 employees)	32	11
Small enterprise (10-50 employees)	102	34
Medium enterprise (50-250 employees)	130	43
Large enterprise (250 + employees)	19	06
Total	300	100

Source: Survey data

The researchers predicted that the INT-SME causal effect varies with the moderator (EMS). Standardized scores of INT (Intention), EMS (Entrepreneurial mind-set) and SME were used along with the transformed score of Zscore (INT) Zscore (EMS)] to test the moderating effect of the entrepreneurial mindset on the relationship between intention and behaviour resulting in SME start-ups and growth. The relationship is verified by plotting the regression of SME on INT called simple regression slopes (Cohen et al., 2003; Holmbeck, 2002) as shown in Figure 3.

**Figure 3: Relationship between entrepreneurial intention and behaviour resulting in SME start-ups and growth is moderated by the entrepreneurial mindset**



Source: Constructed by the researchers based on survey data

As shown in Figure 3, there is a positive relationship between Entrepreneurial Intention and SME start-up initiatives even at the normal level. When the individual's Entrepreneurial Mind-set is high and if the individual is innovative, opportunity-seeking and always views needs, problems and challenges as opportunities, then there is a stronger relationship between INT and SME start-up initiatives compared to the previous scenario due to demonstrated relatively stable personality traits. It is illustrated by the positive gradient of the graph (Figure 3) and confirms that the Entrepreneurial Mind-set (EMS) moderates (amplifies) the relationship between Entrepreneurial Intention (INT) and SME start-up initiatives. Hence, the research findings support Hypothesis 5 ( $H_5$ ) and the relationship between Entrepreneurial Intention and behaviour resulting in SME start-up and growth is moderated by Entrepreneurial Mindset.

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A mediator analysis was conducted by analyzing the full model, the mediated model and the direct model of the conceptual model (Gionta et al, 2005). Table 7 shows the results of the mediator analysis.

**Table 7: Entrepreneurial Intention – mediator analysis**

Model	X <sup>2</sup>	df	ΔX <sup>2</sup>	CFI	AIC
Full	2401.14	1257	-	0.827	3138.948
Mediated	2404.19	1260	3.05	0.827	3136.048
Direct Path	3360.90	1261	959.76	0.779	3594.878

Source: Calculated based on the survey data

According to the analysis, when compared with the direct paths only model, the full model is better since  $\Delta X^2$  is significant and when compared with the mediated model, the mediated model as well as the full model fits the data equally well since  $\Delta X^2$  is not significant (at  $p < 0.001$ ). Hence, the mediated model is accepted as it is more parsimonious. But it is evident that Entrepreneurial Intention is not a full mediator but a partial mediator particularly when considering variables such as the internal value system and entrepreneurial self-efficacy. As per the statistical results, the variable subjective norms do not demonstrate a significant direct relationship with SME start-up and growth behaviour. It depicts a full mediation effect with Entrepreneurial Intention (i.e., the relationship between subjective norms and behaviour resulting in SME start-ups and growth is fully mediated by Entrepreneurial Intention). Hence, the research findings support Hypothesis 6 ( $H_6$ ).

### Discussion

This study attempts to examine and identify individual intrinsic factors which positively contribute to Entrepreneurial Intention of Sri Lankan MBA students and their intended behaviour resulting in SME start-ups and growth. The results support all hypotheses stated in the research. Individual behaviour purely depends on his/her value system. These internal values play a vital role in determining the individual's action. It is evident that several MBA students who are relational value-seekers prefer to have organizational employment, job security and to have career progression within a company. On the other hand, physiological or social value-seekers use the MBA qualification as a tool to be recognized as professionals in industry and to initiate entrepreneurial activity. As Ajzen and Fishbein (1980)

pointed out, there is a difference between general attitudes toward a phenomenon and attitudes toward performing a specific behaviour. If an individual perceives entrepreneurship as feasible and desirable (i.e., in general, holds a positive attitude), considers entrepreneurship to be in line with his overall goals in life and additionally sees an opportunity to perform an entrepreneurial act (constituting a positive attitude toward performing an entrepreneurial activity) and if there is a need deficit (i.e., the difference between how much of a need there should be and how much is there now), then the individual is likely to form an entrepreneurial intention. The results of this research confirm that the intention of Sri Lankan MBA students to start an entrepreneurial career is strongly related to the internal value system of the individual and among them social and psychological values are strong contributors.

However, it was found that subjective norms exert the weakest influence on intention among the three antecedents. This finding is empirically verified since in the 19 empirical works analyzed by Ajzen (1991) subjective norms tended to contribute very weakly to the intention of carrying out different behaviours. Similarly, in a meta-analysis of the TPB, Armitage and Conner (2001) found social norms to exert the weakest influence on intention among the three antecedents. Further, Krueger et al. (2000) compared the predictive validity of the Ajzen and Shapero-Krueger models, using a sample of 97 senior university business students. Regression analysis using perceived desirability, subjective norms, and perceived feasibility to predict intentions supported Ajzen's theory of planned behaviour, with adjusted R<sup>2</sup> of 0.350 ( $p < 0.01$ ) for the overall model. However, the subjective norms predictor variable was not significant in the regression.

Past research has shown that individuals who have family members and/or close friends who are entrepreneurs are more likely to start their own business than those who have not experienced the same level of exposure to entrepreneurship (Collins and Moore, 1970; Cooper and Dunkelberg, 1984). Approximately 15 percent of the participants in the research questionnaire indicated that their parents are self-employed, when answering the question, "Have your parents ever been self-employed?" In the Sri Lankan context Jayathilake (2010) found that there is a positive relationship between subjective norms and entrepreneurial intention of Sri Lankan individuals. The opinions of parents, spouse, friends and important others might be influential in forming entrepreneurial intention but tends to be not so prominent in the Sri Lankan culture.



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Further, the research findings depict that there is a positive relationship between entrepreneurial self-efficacy and intention to become an entrepreneur. Self-efficacy is a motivational construct (Gist and Mitchell, 1992) and influences one's choices, efforts, emotive reactions and goals. Previous research has shown that self-efficacy predicts career choice (Lent et al., 1994) and entrepreneurial opportunity recognition (Krueger, 1993). In a nutshell, self-efficacy determines what an individual thinks he can do. The empirical research literature has found a strong link between self-efficacy and behaviour. Stajkovic and Luthans (1998) in a meta-analysis of 114 studies of self-efficacy found a significant weighted average correlation of  $r = 0.38$  between self-efficacy and the targeted behaviour. DeNoble et al. (1999) found a correlation of 0.37 ( $p < 0.01$ ) in examining perceived self-efficacy and its relationship with Entrepreneurial Intention. In another study, Krueger et al., (2000) found perceived self-efficacy to positively and significantly correlate with entrepreneurial intentions ( $r = 0.32$ ).

A universally acceptable official definition of SMEs is not available in Sri Lanka as is the case in most developing countries (Dasanayaka, 2009). Thus, in this research the definition given by the Department of Small Industries, Sri Lanka, was used to identify the broad category of Small and Medium Enterprises (SMEs). According to this definition firms with employees from 10 to 50 are identified as small enterprises while those with employees from 50 to 100 are identified as medium enterprises. Thus, as per the research findings it is evident that 232 correspondents in the survey (i.e., 77% of the total correspondents) are expected to start a SME as an entrepreneurial activity. On the other hand, the growth of SMEs is instrumental in increasing profitability by enlarging the firm's market-share, securing the continuity of business in the conditions of growing demand, achieving economies of scale and bringing the firm new business opportunities (Timmons 1999). Growth can be measured with a range of different indicators and high sales (HS), higher return on assets (HRA), higher margin on profits (HMP) and employee growth (EG) selected to measure intended SME growth. It is revealed that the start-up of an SME is the preferred entrepreneurial activity among Sri Lankan MBA students and they expect that the said start-up will have growth opportunity if they are able to achieve higher sales, higher return on assets, and higher profit margins while focusing on employee growth prospectus.

According to the findings of this research, it was evident that the entrepreneurial mind-set moderates (amplifies) the relationship between entrepreneurial intention

and SME start-up initiatives of an individual. When individuals have a higher entrepreneurial mind-set and are innovative, opportunity-seeking and always view needs, problems and challenges as opportunities, there is a stronger relationship between intentions and SME start-up initiatives due to demonstrated relatively stable personality traits (De Noble et al, 1999). Entrepreneurial intention was not a full mediator but a partial mediator when considering the internal value system and entrepreneurial self-efficacy of an individual since internal values and “can do” attitudes may directly result in behaviour supporting entrepreneurial activity.

### **Managerial implications**

The findings of this research suggest that the higher the degree of self-confidence of MBA students in their capabilities, the better their attitudes toward entrepreneurial activity (Franke and Luthje, 2004). Therefore, a real life implication is that an attitudinal change of an individual should be considered as a crucial part of entrepreneurship education in local university systems since it is felt that some components of entrepreneurship can be taught (Drucker, 1985). Introducing graduate students to entrepreneurship at an early stage in the entrepreneurial process can be beneficial as they develop positive attitudes toward starting new businesses as well as initiating and implementing new ideas within existing organizations. Educators need to identify individual students with the specific attitudinal characteristics suggesting entrepreneurial intent and recognize their own potential influence as mentors and use it to nurture, encourage, and support students. In doing this, the identification of intrinsic factors which affect the entrepreneurial intention of an individual is of vital importance.

Further, the research findings reveal that the individuals with higher order values (i.e., physiological, social) tend to become future entrepreneurs since they recognize that entrepreneurship will signify their value in society and self-actualization of their own needs. Hence, entrepreneurial development programmes should pay more attention to the effect of different contexts on cognition. This will increase the effectiveness of the said development activities. Finally, this research attempted to find the relationship between entrepreneurial intention and behaviour resulting in SME start-ups and growth. When considering developing countries like Sri Lanka, the creation of and support for SMEs is one of the highest economic priorities. Entrepreneurship would thrive only if a supporting environment is created for it (Lee, 2010). In order to facilitate the creation of such a supportive environment,

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knowledge of the intrinsic factors affecting entrepreneurship intention would be immensely useful. Only if the authorities in charge of creating an economic atmosphere are aware of these factors can they make adequate decisions and take action to improve the situation.

### **Theoretical implications**

The relationship between the satisfaction of individual needs and the development of personal values has been theorized by humanistic authors for decades. Early works by Maslow (1956) stated that basic psychological needs had to be fulfilled in order for an individual to evolve personalized, self-actualizing values. Testing for the presence of the unproven association between need satisfaction and internal values, how they contribute in forming intentions and resulting behaviour is one of the main theoretical implications of this study. This was realized by applying Liyanage's value pyramid and investigating pivotal questions, "Does entrepreneurship have a "value for me"?", and "Does entrepreneurship signify "value of me"?" in the context of entrepreneurship. The study confirmed that the internal value system of an individual and his/her intention to become an entrepreneur were positively related, and among internal values, higher order values which signify "value of me" have a greater impact on entrepreneurial intention of the individual. This confirms the Ryan and Deci (2000) theory which depicts that values represent avenues for needs satisfaction in the context of entrepreneurial intention and the relationship between need satisfaction and value orientation of Sri Lankan MBA students. In addition, this study provides further support for the use of Ajzen's Theory of Planned Behaviour (1991) as the basis for an entrepreneurial intentions model to test the antecedents of entrepreneurial intention. It highlights the effect of the entrepreneurial mindset as a moderator and entrepreneurial intention as a partial mediator towards behaviour resulting in SME start-ups and growth in the Sri Lankan context.

### **Limitations, directions for future research**

A sample made up of graduate business students is common in entrepreneurial intention research (Fatoki, O (2010), Leiffel et al (2009) and Gird & Bargraim, (2008). They offer the advantage of similar age and qualifications, making it more homogeneous. But in the said sample it is practically hard to include entrepreneurs in real life. Entrepreneurs with professional experience will provide more reliable responses in entrepreneurship research using surveys and experiments. On the other hand, the collected data was based on the perceptions of MBA students, and a

limitation might appear of a possible difference between “perceptions” and “reality”. Understandably, there is always a risk that the perceptions of students on the outside world might be different than the reality. Another limitation is that some factors in the model were broadly defined in general practice and so broadly measured. For example, there isn’t a clearly delineated definition of the construct of entrepreneurial self-efficacy and the entrepreneurial mindset which may lead to difficulties in regard to a reliable and replicable way of measuring the said constructs (Amit et al, 2001). Further, the survey data is subject to deficiencies of common method bias since the dependent and the independent measures were derived from the same source (Williams et al, 1989).

Future research should examine the relationship between entrepreneurial intentions and subsequent behaviour, possibly with other samples rather than with those of business students and particularly a gender-wise analysis. Another avenue of further research is to study entrepreneurs from a career development perspective which shall focus on employment status choice. How serial entrepreneurs who set up one venture after another view career progression can be further analyzed in light of their needs satisfaction and value orientation. In this sense, cognitive and non-cognitive source possibilities as well as variations in the way Ajzen’s model is operationalized in order to continue improving the model’s use is suggested. Finally, further research will determine if values change over time and to what extent they are actually related to entrepreneurial behaviour since intentions-based models examine the intent, but not the timing, of entrepreneurial behaviour (Krueger et al, 2000).

## **Conclusion**

The research outcomes suggest that the internal value system of an individual, subjective norms and entrepreneurial self-efficacy positively affect both intention for SME start-ups and growth behaviours. This study provides further support for the use of Ajzen’s Theory of Planned Behavior (1991) as the basis of an entrepreneurial intentions model and highlights the effect of the entrepreneurial mindset as a moderator and entrepreneurial intention as a partial mediator towards behaviour resulting in SME startups and growth in the Sri Lankan context. It may be possible to influence the process of entrepreneurial behaviour by knowing how self-employment intentions are formed. The research outcome provides an input to entrepreneur strategy developers, academia to craft strategies and to design academic programmes to promote entrepreneurship, shape career aspirations of Sri

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Lankan MBA students via mechanisms such as mentor programmes with successful entrepreneurs, increasing availability of incubator assistance and entrepreneurship training programmes for specific target groups, which are the need of the day since entrepreneurs are considered the “engines of economic growth” (Baron and Shane, 2008; Mellor et al., 2009).

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